REMARKS

In further response to the Office Action dated February 15, 2005, and the Advisory Action dated May 18, 2005, Applicant respectfully requests reconsideration and withdrawal of the rejections of the claims.

At the outset, Applicant notes that the Advisory Action states that the period for reply to the final Office Action expires three months from the mailing date of the final rejection. However, it is to be noted that Applicant's response was filed on April 14, 2005, within two months of the date of the final Office Action. According to MPEP §706.07(f), It is respectfully submitted that the period for reply expires on the mailing date of the Advisory Action, namely May 18, 2005, rather than three months from the mailing date of the final rejection, i.e., May 15, 2005. If the Examiner believes otherwise, she is respectfully requested to explain the basis for her position.

Claims 1, 2, 5-8 and 10 stand rejected under 35 U.S.C § 103, on the grounds that they are considered to be unpatentable over the Kakiuchi et al. patent (U.S. 6,687,017) in view of the Nagashima et al. patent (U.S. 5,581,613). It is respectfully submitted that these patents are directed to distinctly different objectives from the present invention, and therefore do not teach the claimed subject matter, whether they are considered individually or in combination.

More particularly, the claimed invention is directed to a situation such as that depicted in Figure 11 of the application, in which it is possible for applications to send print data directly to the printer (as in the case of Application B), or via the printer driver (as shown for Application A). The printer driver may include software to determine whether an attempt is being made to copy or print prohibited images, e.g., bank notes. If so, the driver can interrupt the printing of such images. However, if the print data is sent directly to the printer by the application, the protective measures provided by the printer driver will not be enforced, and illegal printing can result.

The claimed subject matter operates to detect this type of situation, and prevent illegal printing, even if the print driver has been bypassed. For example, claim 1 recites a first controller that determines whether a received print request instructs data to be sent to the output device via the printer driver software or directly to the output device, so as to bypass the printer driver. The claim also recites a

second controller that is responsive to the first controller for calling an illegal printing prevention function if the data is to be sent via the printer driver, and for prohibiting data from being sent to the output device if the printer request instructs that the data bypass the printer driver software. A similar concept is recited in each of claims 5 and 7.

It is respectfully submitted that the applied references do not suggest this claimed subject matter. While the Kakiuchi patent is also concerned with the prevention of illegal printing, it is directed to an entirely different aspect of such an operation. Specifically, the patent notes that the need to examine each image to be printed, to determine whether prohibited features are present, results in a lowering of the print speed. Also, some features may be falsely identified as being prohibited, thus hindering the printing process. To address these concerns, the Kakiuchi patent discloses that only certain types of images are capable of containing the prohibited features, namely color gray bit map images. See column 10, lines 46-59. Based upon this observation, the Kakiuchi patent teaches that an image recognition unit, that is used to detect the prohibited features, is selectively activated in accordance with the type of image data. In other words, if an image to be printed is not of the type that includes a color gray bit map image, it is not processed through the image recognition unit. Only those images that contain a color gray bit map are fed to the image recognition unit, to thereby increase the overall printing speed and avoid false positives.

It is respectfully submitted that the Kakiuchi patent does not disclose a first controller of the type recited in claim 1, or the determining steps recited in claims 5 and 7. Claim 1 recites that the first controller determines whether a print request instructs data to be sent to the output device via the printer driver or in a manner that bypasses the printer driver. The system disclosed in the Kakiuchi patent does not include a controller that makes this type of determination. Rather, that patent is based on the assumption that *all* data being sent to the printer passes via the printer driver. See, for example, Figures 1 and 4 in which the printer driver is the only entity that communicates with the printer. Since the Kakiuchi patent does not disclose the possibility that data could be sent to the printer without passing through the printer driver, it cannot be interpreted to suggest the need to make a determination *whether*

data is being sent via the printer driver, or otherwise. Accordingly, it is respectfully submitted that the Kakiuchi patent does not disclose a first controller of the type recited in claim 1. For similar reasons, it does not disclose the step of determining whether data is to be sent to the printer via the printer driver or so as to bypass the printer driver, as recited in claims 5 and 7.

Claim 1 further recites a second controller that is responsive to the first controller for prohibiting data from being sent to the output device if the data is to be sent in a manner that bypasses the printer driver. In connection with the claimed second controller, the Office Action relies upon the Nagashima patent, particularly, the external controller 4. It is respectfully submitted, however, that this external controller does not correspond to the second controller recited in claim 1. First, it is not responsive to another controller that makes a determination of the type recited in claim 1, i.e. whether data is to be sent via the printer driver or so as to bypass the printer driver. Second, the Nagashima patent does not disclose that the external controller 4 functions to prohibit data from being sent to an output device, such as a color copying apparatus, if that data is to be sent in a manner so as to bypass the printer driver.

Consequently, even if the teachings of the Nagashima patent are combined with those of the Kakiuchi patent, the result does not suggest the combination of a first controller and a second controller of the type recited in claim 1. For similar reasons, the combination of these two references does not result in a system that performs the "determining" and "prohibiting" steps recited in claims 5 and 7. Accordingly, it is respectfully submitted that claims 1, 5 and 7, are not suggested by the references.

In accordance with another aspect of the invention, the prevention of illegal printing is achieved by a cooperative relationship between the printer driver and the printer itself. Referring to the embodiment in Figure 5 of the application, image data that is acceptable for printing, i.e. that does not contain a prohibited image, is modified by inverting predetermined data bytes. When this data is received at the printer, a complementary modification is performed on all received data. If the data was received via the printer driver, this complementary modification functions to re-invert those data bytes that were inverted by the printer driver, and thereby return the

data to its original form. In the case of other data, however, that was not processed by the printer driver, the complementary modification leaves the data in the inverted format, which renders it unsuitable for printing.

Claims 2, 6 and 8 encompass this aspect of the invention. For example, claim 2 recites a first data modifier for modifying data processed by the driver software. The claim further recites a second data modifier that is provided on the output device and that performs complementary modification on all data received at the output device, regardless of whether the received data has been modified by the first modifier. As a result, data processed by the driver software is returned to its unmodified form, and all other data remains modified.

It is respectfully submitted that the cited references do not suggest this claimed subject matter. In relevant part, the Office Action relies upon the Nagashima patent's disclosure of the encrypting circuits 11 and 21 that are respectively located on the color copying apparatus and the external controller. It is respectfully submitted that these two circuits do not correspond to the first and second data modifiers recited in claim 2. The claim recites that the first data modifier modifies data processed by the driver software. There is no disclosure in the Nagashima patent that the encrypting circuit 21 is associated with the driver software for the color copying apparatus 5, i.e. that it modifies data processed by the driver software.

Furthermore, claim 2 recites that the second data modifier performs a complementary modification on all data received at the output device, regardless of whether the received data has been modified by the first modifier. Again, there is no disclosure in the Nagashima patent that the encrypting circuit 11 operates in such a manner.

Finally, claim 2 recites that, as a result of the relationship between the first and second data modifiers, data that is processed by the driver software is returned to its unmodified form, whereas other data remains modified. Again, there is no teaching of such a concept in the Nagashima patent.

For at least these reasons, therefore, it is respectfully submitted that the Nagashima patent does not suggest the claimed subject matter to a person of ordinary skill in the art, even when it is combined with the disclosure of the Kakiuchi
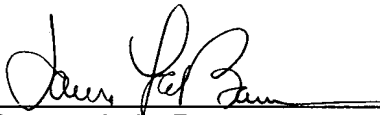
patent. For analogous reasons, it is respectfully submitted that the subject matter of claims 6 and 8 is likewise not suggested by the teachings of the references.

In view of the foregoing, it is respectfully submitted that all pending claims are allowable over the Kakiuchi and Nagashima patents, whether considered individually or in combination. Reconsideration and withdrawal of the rejection is respectfully requested.

Respectfully submitted,

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